Performance Data Sheet

AE4450Y-FZ1C

General Information

Model	AE4450Y-FZ1C	**Refrigerant**	R-134a
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	**90**	**100**	**110**	**120**	**130**	**140**
5	Btu/h	2250	2130	1990	1840	1670	1490	1290
	Watts	296	306	319	333	347	358	365
	Amps	2.29	2.31	2.35	2.40	2.44	2.47	2.48
	Lb/h	28.8	28.6	28.0	27.1	26.0	24.5	22.8
10	Btu/h	2570	2430	2280	2110	1930	1740	1540
	Watts	313	324	337	353	369	383	393
	Amps	2.34	2.37	2.41	2.46	2.51	2.55	2.58
	Lb/h	32.8	32.7	32.1	31.3	30.2	28.9	27.3
15	Btu/h	2930	2770	2590	2410	2210	2010	1800
	Watts	330	341	356	373	391	408	422
	Amps	2.39	2.42	2.47	2.52	2.58	2.64	2.68
	Lb/h	37.4	37.2	36.6	35.8	34.7	33.4	31.9
20	Btu/h	3330	3130	2930	2730	2510	2290	2070
	Watts	348	359	375	393	414	433	451
	Amps	2.45	2.48	2.53	2.59	2.66	2.73	2.79
	Lb/h	42.5	42.1	41.5	40.7	39.6	38.3	36.8
25	Btu/h	3770	3540	3310	3070	2830	2590	2340
	Watts	365	376	393	414	437	459	480
	Amps	2.51	2.54	2.60	2.67	2.75	2.83	2.91
	Lb/h	48.1	47.7	46.9	46.0	44.8	43.5	41.9
30	Btu/h	4260	3990	3720	3450	3180	2910	2640
	Watts	381	394	412	435	460	486	510
	Amps	2.57	2.60	2.66	2.74	2.84	2.93	3.02
	Lb/h	54.5	53.8	52.9	51.8	50.5	49.0	47.4
35	Btu/h	4790	4480	4170	3860	3550	3250	2950
	Watts	398	411	431	455	483	512	540
	Amps	2.63	2.67	2.73	2.82	2.93	3.04	3.14
	Lb/h	61.5	60.6	59.5	58.2	56.7	55.1	53.3
40	Btu/h	5380	5020	4660	4310	3960	3620	3280
	Watts	414	428	449	476	506	538	571
	Amps	2.69	2.73	2.80	2.90	3.02	3.14	3.27
	Lb/h	69.4	68.1	66.7	65.2	63.5	61.6	59.7

45	Btu/h	6020	5600	5190	4790	4400	4010	3630
	Watts	430	444	467	496	529	564	601
	Amps	2.75	2.80	2.87	2.98	3.11	3.25	3.39
	Lb/h	78.1	76.5	74.8	72.9	70.9	68.8	66.7
50	Btu/h	6720	6240	5780	5320	4870	4440	4020
	Watts	444	460	485	516	551	590	631
	Amps	2.81	2.86	2.94	3.06	3.20	3.36	3.52
	Lb/h	87.7	85.7	83.6	81.3	79.0	76.6	74.2
55	Btu/h	7480	6940	6410	5890	5390	4900	4430
	Watts	458	475	501	535	573	616	660
	Amps	2.87	2.92	3.01	3.14	3.29	3.46	3.65
	Lb/h	98.3	95.8	93.3	90.6	87.9	85.2	82.4
60	Btu/h	8310	7700	7100	6520	5950	5410	4880
	Watts	472	490	517	553	595	641	690
	Amps	2.92	2.98	3.08	3.21	3.38	3.57	3.77
	Lb/h	110	107	104	101	97.6	94.5	91.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.277814E+03	5.032162E+02	3.356836E+00	1.133672E+01
C2	9.315393E+01	7.374693E+00	3.013009E-02	7.198497E-01
C3	1.828587E+00	-8.282039E+00	-3.806762E-02	3.759873E-01
C4	1.425700E+00	-5.393362E-03	2.687176E-05	1.516976E-02
C5	-7.088307E-01	-9.989149E-02	-4.970105E-04	-2.125364E-03
C6	-6.708481E-02	9.248444E-02	4.069279E-04	-2.844972E-03
C7	4.228586E-03	-1.659869E-04	-1.006728E-06	8.462805E-05
C8	-1.037923E-02	1.745197E-04	9.233324E-07	-1.039802E-04
C9	2.883525E-03	6.085029E-04	2.894106E-06	2.300213E-05
C10	-6.731624E-05	-2.982324E-04	-1.316170E-06	3.714719E-06

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

Performance Data Sheet

AE4450Y-FZ1C

General Information

Model	AE4450Y-FZ1C	**Refrigerant**	R-134a
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-15	Btu/h	2180	1930	1630	1290
	Watts (Power)	302	325	349	365
	Amps	2.30	2.37	2.45	2.48
	Lb/h	28.7	27.7	25.7	22.8
-10	Btu/h	2760	2450	2120	1750
	Watts (Power)	333	359	390	416
	Amps	2.40	2.48	2.58	2.66
	Lb/h	36.3	35.4	33.6	31.0
-6.7	Btu/h	3210	2850	2470	2060
	Watts (Power)	353	382	417	450
	Amps	2.47	2.55	2.68	2.79
	Lb/h	42.2	41.2	39.3	36.7
-5	Btu/h	3460	3070	2660	2230
	Watts (Power)	364	394	432	468
	Amps	2.50	2.60	2.73	2.86
	Lb/h	45.6	44.4	42.4	39.8
0	Btu/h	4290	3780	3270	2760
	Watts (Power)	395	429	474	522
	Amps	2.61	2.72	2.89	3.07
	Lb/h	56.8	55.0	52.6	49.7
5	Btu/h	5280	4620	3970	3350
	Watts (Power)	425	463	517	577
	Amps	2.73	2.86	3.06	3.29
	Lb/h	70.3	67.7	64.5	61.1
7.2	Btu/h	5760	5030	4320	3630
	Watts (Power)	437	478	536	601
	Amps	2.77	2.91	3.14	3.39
	Lb/h	77.1	74.0	70.4	66.6
10	Btu/h	6430	5590	4790	4020
	Watts (Power)	453	496	559	631
	Amps	2.83	2.99	3.23	3.52
	Lb/h	86.5	82.7	78.5	74.2

15	Btu/h	7780	6730	5730	4780
	Watts (Power)	478	528	600	684
	Amps	2.94	3.11	3.40	3.75
	Lb/h	106	100	95.0	89.4

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	5.873371E+03	4.715201E+02	3.087080E+00	5.708904E+01
C2	2.815244E+02	7.746483E+00	3.187337E-02	3.047909E+00
C3	-5.413876E+01	-9.091459E+00	-4.517860E-02	1.402951E-01
C4	4.858409E+00	-5.100886E-02	-1.303371E-04	6.469206E-02
C5	-3.850921E+00	-1.612809E-01	-8.187300E-04	-2.367779E-02
C6	6.067104E-02	2.699770E-01	1.209126E-03	-5.677422E-03
C7	2.466111E-02	-9.680356E-04	-5.871238E-06	4.935508E-04
C8	-6.053167E-02	1.017799E-03	5.384875E-06	-6.064125E-04
C9	1.681672E-02	3.548789E-03	1.687843E-05	1.341484E-04
C10	-3.925883E-04	-1.739291E-03	-7.675903E-06	2.166424E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

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Performance Data Sheet

AE4450Y-FZ1C

General Information

Model	AE4450Y-FZ1C	**Refrigerant**	R-134a
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	240V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-15	Watts (Capacity)	640	564	478	376
	Watts (Power)	302	326	349	365
	Amps	2.30	2.37	2.45	2.48
	Lb/h	13.0	12.5	11.7	10.3
-10	Watts (Capacity)	811	717	620	513
	Watts (Power)	332	360	390	415
	Amps	2.40	2.48	2.58	2.66
	Lb/h	16.5	16.0	15.2	14.1
-6.7	Watts (Capacity)	942	832	722	606
	Watts (Power)	352	383	418	450
	Amps	2.46	2.56	2.68	2.79
	Lb/h	19.2	18.6	17.8	16.7
-5	Watts (Capacity)	1020	896	778	655
	Watts (Power)	363	395	432	468
	Amps	2.50	2.60	2.73	2.86
	Lb/h	20.7	20.0	19.2	18.1
0	Watts (Capacity)	1260	1110	957	810
	Watts (Power)	392	430	475	522
	Amps	2.61	2.73	2.89	3.07
	Lb/h	25.9	24.9	23.8	22.6
5	Watts (Capacity)	1550	1350	1160	982
	Watts (Power)	420	463	518	576
	Amps	2.71	2.86	3.06	3.29
	Lb/h	32.1	30.6	29.2	27.7
7.2	Watts (Capacity)	1700	1470	1260	1060
	Watts (Power)	431	478	537	600

	Amps	2.76	2.91	3.14	3.39
	Lb/h	35.3	33.5	31.9	30.2
10	Watts (Capacity)	1900	1640	1400	1180
	Watts (Power)	445	495	560	631
	Amps	2.82	2.98	3.23	3.52
	Lb/h	39.7	37.6	35.6	33.6
15	Watts (Capacity)	2300	1980	1680	1400
	Watts (Power)	466	524	599	684
	Amps	2.91	3.11	3.40	3.75
	Lb/h	48.7	45.8	43.1	40.5

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.839412E+03	4.013707E+02	2.937104E+00	2.954764E+01
C2	8.539739E+01	5.851502E+00	2.778917E-02	1.500187E+00
C3	-2.310268E+01	-4.851415E+00	-3.612431E-02	-1.571599E-01
C4	1.493399E+00	-8.233340E-02	-1.954675E-04	3.147284E-02
C5	-1.236945E+00	-9.187459E-02	-6.694110E-04	-1.51304E-02
C6	1.585222E-01	1.881969E-01	1.034619E-03	1.650117E-03
C7	7.784860E-03	-1.149866E-03	-6.232476E-06	2.364577E-04
C8	-1.901063E-02	1.563903E-03	6.513961E-06	-3.122832E-04
C9	5.905217E-03	2.933815E-03	1.555722E-05	1.001890E-04
C10	-9.918053E-04	-1.231933E-03	-6.593673E-06	-1.612981E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

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